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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/848,711 | 05/03/2001 | Mary Thomas Robb | 10006616-1 | 7927 |

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

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| EXAMINER |
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WIDHALM, ANGELA M

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| ART UNIT | PAPER NUMBER |
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2152

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07/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 09/848,711 | Applicant(s) ROBB ET AL. | |
| | Examiner Angela Widhalm | Art Unit 2152 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14-17, 19-21, 23 and 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-17, 19-21, 23 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is a non-final office action in response to remarks filed on 24 April 2007. No claims have been amended or added. Claims 13, 18, and 22 were previously canceled. Claims 1-12, 14-17, 19-21, and 23-24 are pending.

Response to Arguments

2. Applicant's arguments filed 24 April 2007 have been fully considered but they are not persuasive.

3. Applicant argues Koseki does not disclose pausing the event when requesting the log entry information to be written to a log file and allowing the consumer to resume event execution prior to writing the log entry clone to the log file. Examiner respectfully disagrees. Koseki describes logging a transaction. Each modification made during the transaction is stored as a log file in a log buffer. When the log buffer is approaching overflow and the transaction is not yet completed, the transaction is inherently paused while the log entries in the log buffer are copied into an interim log file. Transaction execution then resumes. At a later point in time after the transaction has been completed and after the remaining log entries have been combined with the log entries in the interim log file and moved to the log write buffer, the log entries in the log write buffer are stored in the log volume. See col. 22 lines 47-59, col. 23 lines 13-16.

Claim Objections

4. Claim 1 is objected to because of the following informalities: claim 1 lines 7-8 state "wherein a the consumer." Appropriate correction is required.

Drawings

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, pausing the event as claimed in independent claims 1, 12, 17, and 21 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Summary of Claimed Invention

6. The claimed invention relates to a method, system, and computer readable medium for logging events independently and separately from other processes in a computer system. The invention comprises initiating an event, logging the event, pausing event execution while cloning the log entry, resuming event execution before writing the cloned log entry to the log file. It is conventional practice for an event to be paused (e.g. access to data is temporarily blocked) while a log entry is being written to a log file and to resume event execution once writing to the log file is completed. Writing a copy of a log entry to the log file may be done at any point in time depending on the administrator's preference because the original has already been stored in the log file. In which, in the same field of endeavor, the applied references teach the same.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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8. Claims 1-12, 14-17, 19-21, and 23-24 are rejected under 35 U.S.C. 102(e) as being unpatentable over Koseki et al. (U.S. Patent 6,732,134), hereafter referred to as Koseki.

9. Regarding claims 1, 12, 17, Koseki teaches a method for logging events independently and separately from other processes in a computer system, comprising: (Koseki, col. 12 lines 24-26, col. 49 lines 13-15; *A log-writing daemon runs independently of the transactions*)

initiating an event by a consumer, wherein the event is processed by a computer system (see col. 9 lines 12-14, col. 10 lines 48-58, fig. 15 S1, col. 19 line 10; *the transaction for updating a metadata object is processed by a computer system*)

creating a log entry, wherein creation of the log entry is requested by the consumer and the log entry comprises information that describe the event (see col. 7 lines 13-17, col. 9 lines 16-20, col. 10 lines 12-16, fig. 15 S2, col. 19 lines 11-12; *log entries represent the updated metadata object and are stored in the log buffer*)

requesting that the log entry information be written to a log file, wherein the consumer surrenders control of the log entry, pausing execution of the event (see col. 6 lines 19-20, col. 10 lines 48-58, col. 14 lines 39-45, col. 22 lines 47-51, col. 23 lines 13-16; *The log entries in the log buffer are written to an interim log block when the log buffer is about to overflow and the transaction is not yet finished. Transaction execution is inherently paused at this point in time*); and

cloning the log entry, wherein the log entry clone is a copy of an entire log entry that comprises the log entry information (see col. 22 lines 47-51, col. 23 lines 13-16; *The log entries in the log buffer are written to an interim log block when the log buffer is about to overflow and the transaction is not yet finished*); and

allowing the consumer to resume executing the paused event (see col. 22 lines 47-51, col. 23 lines 13-16; *After copying log entries to the interim log file, the transaction resumes execution*) so that execution of the paused event resumes prior to writing the log entry clone to the log file (see col. 22 lines 54-59, col. 28 lines 15-18, col.35 lines 17-18, col.36 lines 36-51; *Upon transaction completion, log entries are moved from the log buffer to the log write buffer and are written to the log volume at predetermined intervals and not necessarily immediately after each metadata change*).

10. Regarding claim 21, the claim contains the limitations of claim 1 above, further comprising: writing the log entry information to the log file using the log entry clone, after execution of the paused event has resumed (see col. 22 lines 54-59, col.35 lines 17-18, col.36 lines 36-51; *Log entries are written to the log volume at predetermined times after transactions are completed, i.e. after the transaction has resumed and finished execution*).

11. Regarding claim 2, Koseki disclosed the cloning step is performed by a multiple-thread log manager (see col. 12 lines 24-26, col. 49 lines 13-15, col. 15 lines 40-45).

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12. Regarding claims 3, 14, and 24, Koseki disclosed queuing the log entry clone in a queue that determines when the log entry information is written to the log file (see col. 44 lines 35-40)

13. Regarding claim 4, Koseki disclosed the queue is a first in, first out queue - as described in Microsoft computer dictionary 5th edition "queue follows a first in, first out constraint" - (see col. 44 lines 33-40).

14. Regarding claims 5 and 15, Koseki disclosed wherein at some time the log entry clone has a turn, the method further comprising:

determining if the log entry clone is next in the queue; (see col. 10 lines 40-43)

and

if the log entry clone is next in the queue, writing the log entry information to log file (see col. 10 lines 43-46).

15. Regarding claims 6 and 20, Koseki disclosed the log entry is an object comprising attributes populated with the log entry information (see col. 30 lines 9-11).

16. Regarding claim 7, Koseki disclosed the event is a configuration event (see col. 22 lines 24-26).

17. Regarding claim 8, Koseki disclosed the consumer is a client (see col. 50 lines 32-34).

18. Regarding claim 9, Koseki further disclosed wherein the event is a task event, the method further comprising: starting a log transaction, wherein starting a log transaction comprises a consumer sending a message that a sequence of related task log entries are to be sent (see col. 11 lines 26-28).

19. Regarding claim 10, Koseki disclosed:

determining if the task event has ended, wherein the end of the task event comprises the completion of the task event or a failure to complete the task event (see col. 14 lines 28-33); and

if the task event has ended, terminating the log transaction, wherein terminating the log transaction indicates that a sequence of log entries associated with the task event has ended and that the log file may be rolled-over without interrupting logging of the task event (see col. 18 lines 65-67).

20. Regarding claims 11 and 19, Koseki disclosed the consumer is a task manager (see col. 39 lines 46-49).

21. Regarding claim 23, Koseki disclosed the log entry clone determines when the log entry is written (see col. 10 lines 8-23).

Conclusion

22. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.


In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela Widhalm whose telephone number is (571) 272-1035. The examiner can normally be reached M-F, 9:00 am - 5:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Angela Widhalm
Examiner
Art Unit 2152
20 July 2007



BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER